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EXAMINER

PHAN, TRI H

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary**Application No.**

09/823,480

Applicant(s)

STILES ET AL.

Examiner

Tri H. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-11, 14, 15 and 17-22 is/are rejected.
- 7) ☐ Claim(s) 12, 13 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>01/29/2002</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 4, 7 and 13 are objected to because of the following informalities:

In claim 4, a semicolon is needed at the end of line 3 (after the phrase “first interfaces”) for clarity.

In claim 7, line 8, the word “a” in front of the phrase “first switch fabric” should be correct to --- the --- for clarity.

In claim 13, line 23, the word “a” in front of the phrase “packet mesh” should be correct to --- the --- for clarity.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 4, 11, 17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In regard to claim 1, line 8, the method “encapsulating the packet data with a second number of protocol headers” is vague and unclear because the examiner is unclear and do not

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know why “de-encapsulating ... the packet data” and then “encapsulating the packet data” for; or which “packet data” is “de-encapsulating” and which “packet data” is “encapsulating”.

Claim 4 is rejected for the same rejection’s reason given in claim 1, where “the packet data” is “de-encapsulating” (line 6) and is “encapsulating” (line 7).

Claim 11 is rejected for the same rejection’s reason given in claim 1, where “the packet data” is “de-encapsulating” (claim 10) and is “encapsulating” (claim 11).

Claim 14 is rejected for the same rejection’s reason given in claim 1, where “the packet data” is “de-encapsulating” (line 3) and is “encapsulating” (line 4).

Claim 17 is rejected for the same rejection’s reason given in claim 1, where “the packet data” is “de-encapsulating” (line 7) and is “encapsulating” (line 9).

Claim 20 is rejected for the same rejection’s reason given in claim 1, where “the packet data” is “de-encapsulating” (line 7) and is “encapsulating” (line 8).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by **Locascio** (U.S.6,603,757).

- In regard to claim 7, **Locascio** discloses in Figs. 1-2C and in the respective portions of the specification about the programmable telecommunications switch (“*network element*”), which operable as a node in an expandable telecommunications system for conducting telecommunications over the Internet (For example see Fig. 1; Abstract; col. 1, lines 9-14); which includes line cards IO connecting to circuit-based network/line interfaces, VDAC cards connecting to packet-based network interfaces, ring IO cards and host interfaces for receiving and transmitting data to/from different networks with different protocols (“*first/second line cards with interfaces*”; For example see Fig. 1; col. 2, lines 43-59; col. 3, lines 9-16) under the control of the CPU/matrix card (“*control card*”; For example see Fig. 1; col. 3, lines 17-55); wherein data is transmitting through the ethernet switch (“*first switch fabric*”; For example see Fig. 2A; col. 3, lines 57-63) for providing internet-working between packet-based communication protocols and circuit-based communication protocols; the TDM bus switch (“*second switch fabric*”; For example see Fig. 2A; col. 3, line 64 through col. 4, line 4) for switching data between VDAC card and switching buses (“*switching data through the second switch fabric*”) if the packets contain timeslots (“*determining that data is being processed as TDM traffic*”; For example see Fig. 2A; col. 4, line 42 through col. 5, line 4).

- Regarding claims 8-9, **Locascio** further teaches about receiving/transmitting the TDM signal through interfaces (For example see Fig. 2A; col. 4, line 42 through col. 5, line 4)

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Locascio** (U.S.6,603,757).

- In regard to claim 10, **Locascio** discloses in Figs. 1-2C and in the respective portions of the specification about the programmable telecommunications switch ("*network element*"), which operable as a node in an expandable telecommunications system for conducting telecommunications over the Internet; which includes line cards IO connecting to circuit-based network/line interfaces, VDAC cards connecting to packet-based network interfaces, ring IO cards and host interfaces for receiving and transmitting data to/from different networks with different protocols ("*first/second line cards with interfaces*") under the control of the CPU/matrix card ("*control card*"); wherein data is transmitting through the ethernet switch ("*first switch fabric*") for providing internet-working between packet-based communication protocols and circuit-based communication protocols; the TDM bus switch ("*second switch fabric*") for switching data between VDAC card and switching buses ("*switching data through the second switch fabric*") if the packets contain timeslots ("*determining that data is being processed as TDM traffic*") as discussed in part 6 above of this Office action, including the DSP in the daughter card ("*ingress packet processing circuitry*"; For example see col. 4, lines 5-18) for

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digital processing data, packetizing and depacketizing to convert from one protocol to another protocol (For example see col. 4, lines 23-41). Though, **Locascio** does not explicitly disclose about “*de-encapsulating the protocol headers from the packets*”; however, it is obvious that, in order to packetize and depacketize the IP packets to convert from one protocol to another protocol (For example see col. 3, lines 9-16) for transmitting over the ethernet switch (For example see col. 4, line 42 through col. 5, line 4), the IP packets are depacketizing, e.g. “*de-encapsulating the protocol headers from the packets*”, or packetizing, e.g. “*encapsulating the packet data*”.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the “*de-encapsulate the protocol headers from the packets*” in the protocol conversion as taught by **Locascio**’s system, with the motivation being to provide the ability to modify the protocol header or type in the transmission packet data.

Allowable Subject Matter

8. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 13-16 would be allowable if rewritten or amended to overcome the objection and rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pickett (U.S.6,181,694), **Opalka et al.** (U.S.6,259,699), **Jha** (U.S.6,778,561), **Williams** (U.S.6,356,550), **Dejager et al.** (U.S.5,533,018) and **Humphrey et al.** (U.S.6,320,877) are all cited to show systems and methods for transmission data with different data types and protocols in the telecommunication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tri H. Phan
October 17, 2004



DANG TON
PRIMARY EXAMINER